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IFW

4-21-04

\$DAC

"Express Mail" mailing label no.: EV 443736306 US Date of Deposit: April 20, 2004  
I hereby certify that this paper or fee is being deposited with the United States Postal Service's "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to: Mail Stop PETITIONS, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By Maria E. Vega [MARIA E. VEGA]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Group Art Unit: Unknown
MOISES CALDERON	)	Examiner: Unknown
Serial No.: 10/768,728	)	
Filed: January 30, 2004	)	
For: LOW FLOW ATRIAL-ARTERIAL	)	
SHUNT FOR PUMP-ASSISTED	)	
MYOCARDIAL	)	
REVASCLARIZATION WITHOUT	)	
CARDIOPULMONARY BYPASS	)	

PETITION TO CORRECT INCORRECTLY ENTERED DATE-IN  
UNDER 37 CFR 1.10(d)

Mail Stop PETITIONS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.10(d), the Applicant hereby petitions the Commissioner to correct an incorrectly entered "Express Mail Post Office to Addressee" date-in for the above-noted patent application. Specifically, the Applicant requests that the Commissioner accord the above-noted application a filing date of January 29, 2004.

The present petition is being filed promptly after the undersigned, the attorney of record, became aware that the Patent Office will accord a filing date based upon an incorrect Express Mail date-in entry by the United States Postal Service ("USPS"). Specifically, on a return

04/22/2004 RUC:DAF1 00000073 10760720

01 FC:1450

130.00 09

postcard received from the Patent Office, a filing date of January 30, 2004 ("013004") is indicated, contrary to the actual filing date of January 29, 2004. A copy of the return postcard is attached as Exhibit A.

In addition, investigating further, it was revealed that the date-in field on the Express Mail label no. EV 373381201 US for the above-noted application was filled in as "1-30-04" with a time-in of "8:38 am." A copy of the Express Mail label is attached as Exhibit B. However, since the application packet was actually deposited with the USPS on January 29, 2004 in the afternoon, and not on January 30, 2004 in the morning, it became apparent that the USPS entered an incorrect date-in.

A copy of the pertinent application papers is attached as Exhibit C to show that the number of the Express Mail mailing label was placed on each piece of correspondence prior to the original mailing.

As corroborated by the following evidence from the USPS, the above-noted application was actually deposited as Express Mail prior to the last scheduled pickup on the requested filing date, namely, January 29, 2004:

- Exhibit D is a printout of a tracking record showing that the application, mailed under Express Mail label no. EV 373381201 US, was en route from Springfield, Massachusetts to the Patent Office on January 29, 2004. Accordingly, the application packet must have actually been deposited as Express Mail on January 29, 2004.
- Exhibit E is a copy of a letter from the USPS confirming that: (i) the USPS failed to enter an "Accept" or "Pickup" scan when the application was originally picked up on January 29, 2004 (see ¶ 4); (ii) the USPS entered an incorrect date-in based on when the application packet was received in Dulles, VA 20102 on January 30, 2004, instead of when it was deposited on January 29, 2004 (see ¶¶ 2 & 4); and (iii) the actual date/time of deposit "would have occurred a few minutes before the Enroute scan in Springfield, MA 01152", *i.e.*, a few minutes before January 29, 2004 at 19:29 hours (see ¶ 3).

In light of the above, the Applicant respectfully submits that a proper showing under 37 C.F.R. § 1.10(d) has been established, and requests that the date-in and filing date for this application be corrected to January 29, 2004. A check in the amount of \$130 is attached for the petition fee. However, if no fee is required, or if an additional fee is required, please charge/refund it to Deposit Account No. 08-2622.

Respectfully submitted,

A handwritten signature in cursive script that reads "John A. Kramer".

John A. Kramer  
Attorney for Applicant  
Registration No. 46302  
Customer No. 27804  
HOLLAND & BONZAGNI, P.C.  
Longmeadow Professional Park  
171 Dwight Road, Suite 302  
Longmeadow, MA 01106-1700  
(413) 567-2076

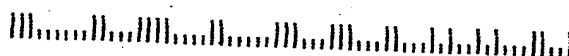
Date: April 20, 2004

[02082P08]



HOLLAND & BONZAGNI, P.C.  
LONGMEADOW PROFESSIONAL PARK  
171 DWIGHT ROAD, SUITE 302  
LONGMEADOW, MA 01106-1700

06  
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Applicant: EMILIO SACRISTAN ROCK

*Received*

Kindly acknowledge receipt of the accompanying papers, <sup>FEB 9 2004</sup> including 10 pgs. of specification, 19 claims, abstract, Unexecuted Declaration and Power of Attorney, 3 sheets of formal drawings, and \$428 check. Also enclosed is an accompanying Information Disclosure Statement Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b); and form PTO/SB/08A for the above-identified application by placing the date stamp of the Patent Office hereon and mailing this card to us.

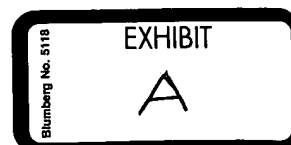
Our Docket No.: 02082P

17497 U.S. PTO  
107768728

[02082P06]



013004





EV 373381201 US



UNITED STATES POSTAL SERVICE®

Customer Copy  
Label 11-F June 2002

Post Office To Addressee

ORIGIN (POSTAL USE ONLY)				DELIVERY (POSTAL USE ONLY)			
PO ZIP Code 00102		Day of Delivery <input checked="" type="checkbox"/> Next <input type="checkbox"/> Second		Flat Rate Envelope <input type="checkbox"/>		Delivery Attempt Mo. Day	
Date In Mo. Day Year 2 20 2004		<input type="checkbox"/> Noon <input type="checkbox"/> 3 PM		Postage \$ 17.85		Time <input type="checkbox"/> AM <input type="checkbox"/> PM	
Time In <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		Military <input type="checkbox"/> 2nd Day <input type="checkbox"/> 3rd Day		Return Receipt Fee		Employee Signature Received	
Weight lbs. 0.3 ozs		Int'l Alpha Country Code		COD Fee		Employee Signature FEB - 4 2004	
No Delivery <input type="checkbox"/> Weekend <input type="checkbox"/> Holiday		Acceptance Clerk Initials X01		Insurance Fee		Employee Signature Holland & Bonzagni, P.C.	
METHOD OF PAYMENT: Express Mail Corporate Acct. No. X01034		Total Postage & Fees \$ 17.85		<input type="checkbox"/> WAIVER OF SIGNATURE (Domestic Only) Additional merchandise insurance is void if waiver of signature is requested. I wish delivery to be made without obtaining signature of addressee or addressee's agent (if delivery employee judges that article can be left in secure location) and I authorize that delivery employee's signature constitutes valid proof of delivery.			
CUSTOMER USE ONLY FROM: (PLEASE PRINT) HOLLAND & BONZAGNI, P.C. 171 DWIGHT RD STE 302 LONGMEADOW MA 01106-1700 [02082P06] Sacristan				CUSTOMER USE ONLY TO: (PLEASE PRINT) Mail Stop PATENT APPLICATION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450			
PRESS HARD. You are making 3 copies.				FOR PICKUP OR TRACKING CALL 1-800-222-1811 www.usps.com			

Blumberg No. 5118

EXHIBIT

B



"Express Mail" mailing label no.: EV 373381201 US Date of Deposit: January 29, 2004  
I hereby certify that this paper or fee is being deposited with the United States Postal Service's "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to Mail Stop PATENT APPLICATION, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By Bonnie A. Anderson [BONNIE A. ANDERSON]

HOLLAND & BONZAGNI, P.C.  
Longmeadow Professional Park  
171 Dwight Road, Suite 302  
Longmeadow, Massachusetts 01106-1700

EV373381201US

APPLICATION TRANSMITTAL LETTER

Mail Stop PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Transmitted herewith for filing is the patent application of

Inventor(s): MOISES CALDERON

For: LOW FLOW ATRIAL-ARTERIAL SHUNT FOR  
PUMP-ASSISTED MYOCARDIAL REVASCULARIZATION  
WITHOUT CARDIOPULMONARY BYPASS

Also enclosed are: 3 sheets of Formal drawings;  
Unexecuted Declaration and Power of Attorney;  
Information Disclosure Statement; and  
Prior Art Form

CLAIMS AS FILED

CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
BASIC FEE-----					\$385.00
	Total Claims	19 - 20 =	0	x \$ 9.00	\$ -0-
	Independent Claims	4 - 3 =	1	x \$ 43.00	\$ 43.00
	Multiple Dependent Claim(s) (if applicable)			+ \$140.00	\$ -0-
TOTAL FILING FEE-----					\$428.00

SMALL ENTITY IS CLAIMED.

A check in the amount of \$428 is attached.

Please charge any additional fees or credit overpayment to Deposit Account No. 08-2622.

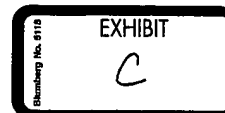
Respectfully submitted,

John A. Kramer

John A. Kramer  
Attorney for Applicant  
Registration No. 46302  
Customer No. 27804  
(413) 567-2076

Date: January 29, 2004

[02082P06]



LOW FLOW ATRIAL-ARTERIAL SHUNT  
FOR PUMP-ASSISTED MYOCARDIAL REVASCULARIZATION  
WITHOUT CARDIOPULMONARY BYPASS

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[0001] This application claims priority from a Provisional Application, Serial Number 60/443,411, filed January 29, 2003.

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FIELD OF THE INVENTION

[0002] The present invention relates to surgical devices and methods, and, more particularly, to devices and methods for temporarily assisting the heart in pumping blood.

BACKGROUND

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[0003] In 1953, Dr. John Gibbon of Philadelphia performed the first successful intracardiac operation with the aid of a heart-lung machine, opening a new era for cardiac surgery and establishing the basis for extracorporeal circulation and circulatory support. The heart-lung machine (also known as the cardiopulmonary bypass machine) is an apparatus that functions in place of a patient's heart and lungs during open-heart operations, providing adequate blood flow and perfusion to the rest of the body, while the heart and lungs are arrested. Its basic components are a pump, which provides flow to the blood, and an oxygenator, which oxygenates and removes CO<sub>2</sub> from venous blood. The machine may also include a blood reservoir and a blood temperature regulator.

20

[0004] The most commonly used blood pump in cardio-pulmonary bypass machines is the peristaltic ("roller") pump. The peristaltic pump consists of two rollers, 180° apart, attached to a central, rotating hub, that are rotated along an arc-shaped (approximately 200°) metal raceway. Plastic tubing between ¼" and 5/8" is placed between the rollers and raceway so that the rollers barely occlude the tubing at 180mmHg back-pressure. As the rollers are rotated along the raceway, one of the rollers successively compresses the tubing, while the opposite roller releases the tubing, so that blood within the tubing is continually propelled in one direction. Put another way, as the rollers are rotated or rolled along the tubing in one direction, the tubing is slightly compressed in a wave-like motion, with blood in the tubing flowing along with the wave-like compression.

30

[0005] While heart-lung machines and associated surgical techniques were a significant medical advancement in their day, medical professionals have come to realize that

35





## Track & Confirm

### Shipment Details

You entered EV37 3381 201U S

Your item was delivered at 11:03 am on January 30, 2004 in ALEXANDRIA, VA 22313 to PATENT OFFICE. The item was signed for by M BOSTON.

Here is what happened earlier:

- ARRIVAL AT UNIT, January 30, 2004, 8:48 am, DULLES, VA 20102
- ACCEPTANCE, January 30, 2004, 8:38 am, DULLES, VA 20102
- ENROUTE, January 29, 2004, 7:29 pm, SPRINGFIELD, MA 01152

### Notification Options

▶ Track & Confirm by email

[What is this?](#)

Go >

▶ Request Proof of Delivery

[What is this?](#)

Go >



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### Track & Confirm

Enter label number:

[Track & Confirm FAQs](#)



## Track/Confirm - Intranet Item Inquiry - Domestic

Item: EV37 3381 201U S

Date/Time Mailed: 01/30/2004 08:38

Destination	ZIP Code: 22313	City: ALEXANDRIA	State: VA
Origin	ZIP Code: 20102-9998	City: DULLES	State: VA

Class: Express Mail - PO to Addressee

Scheduled Delivery: 01/31/2004 12:00

Weight: lb: oz: 9

Postage: \$17.85

EMCA#: 0000010361

Delv Rqmt: Normal

Po Box?: Y

Event	Date	Time	Location	Scanner ID
DELIVERED	01/30/2004	11:03	ALEXANDRIA VA 22313	K752448
Firm Name: PATENT OFFICE				
Recipient : 'M BOSTON'				
<a href="#">Request Delivery Record</a>				
<a href="#">View Delivery Signature and Address</a>				
ARRIVAL AT UNIT	01/30/2004	08:48	DULLES VA 20102	J811581
ACCEPT OR PICKUP	01/30/2004	08:38	DULLES VA 20102	
ENROUTE	01/29/2004	19:29	SPRINGFIELD MA 01152	M166553

Enter Request Type and Item Number:

Quick Search ☒Extensive Search ☐[Explanation of Quick and Extensive Searches](#)

Item Number:

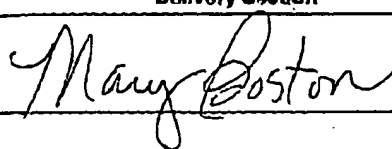
Inquire on multiple items.Go to the Product Tracking System Home Page.

7:29 pm



Track/Confirm - Intranet Item Inquiry  
Item Number: EV37 3381 201U S

This item was delivered on 01/30/2004 at 11:03.

Signature:	 <del>P &amp; T OFFICE</del>
Address:	P & T OFFICE P.O. BOX 1450 Alexandria VA 22313

Enter Request Type and Item Number:

Quick Search ☒ Extensive Search ☐

[Explanation of Quick and Extensive Searches](#)

Item Number:

Submit

Inquire on multiple items.

[Go to the Product Tracking System Home Page.](#)

EXPEDITED SERVICE SPECIALIST  
U. S. POSTAL SERVICE



*Received*

April 14, 2004

APR 15 2004

Holland & Bonzagni PC  
171 Dwight Road, Suite 302  
Longmeadow, MA 01106-1700

*Holland & Bonzagni, P.C.*

Dear Ms. Vega:

This letter is in reference to Express Mail Item No. EV37 3381 201 US destined to the Patent office in Alexandria, VA.

The Express Mail item shows an Enroute scan in Springfield, MA 01152 on January 29, 2004, at 19:29. However, this Express Mail has an Accept or Pickup scan in Dulles, VA 20102 on January 30, 2004, at 08:38.

The Enroute scan on January 29, 2004 at 19:29 in Springfield, MA 01152 indicates the correct acceptance of the Express Mail item would have occurred a few minutes before the Enroute scan in Springfield, MA 01152.

Please accept my apology for the missing Accept or Pickup scan in Springfield, MA 01152 for Express Mail Item No. EV37 3381 201 US.

Sincerely,

  
James Jyz

1883 MAIN STREET  
SPRINGFIELD, MA 01101-9600  
413-731-0287  
FAX: 413-731-0330

Blumberg No. 5118

EXHIBIT

E